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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,827	05/22/2006	Thomas Huber	59482.21820	3162

30734 7590 06/29/2011

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EXAMINER	
DINH, TIEN QUANG	

ART UNIT	PAPER NUMBER
3644	

NOTIFICATION DATE	DELIVERY MODE
06/29/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@bakerlaw.com

Office Action Summary	Application No.	Applicant(s)	
	10/564,827	HUBER ET AL.	
	Examiner	Art Unit	
	TIEN DINH	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) *22-25* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 26-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10-12-10*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 5, line 3, "other conducting devices" are considered to be vague and indefinite. There are vast amount of conducting devices and the phrase "other conducting devices" seems to suggest that applicant is claiming all conducting devices.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 13, 18, 21, 26, 28, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Daimler Benz Aerospace Airbus (EP 0681956) now referred to as "Airbus".

Re claims 1, 28, and 29, Airbus discloses a floor having at least one floor element 6c, 6f, a function unit 6e, 7e, and a floor beam 2, 8 being connected to the skin of the fuselage at three different points of the floor beam. The first point is where element 11 is connected to the bottom portion of the aircraft, while the other two points are at the opposite sides. This is best seen in

figures 1-5. The floor element being connected to the floor beam form a prefabricated floor module for installation in the aircraft. The modules are received within the fuselage at the ultimate position prior the module being connected to the fuselage. When the modules are connected to the fuselage, joint means 6f, 7f and attachment means 11 are used to connect the floor module 2 to the fuselage.

Re claim 2, the functional units 7e, 6e is mounted on the floor beam.

Re claim 13, the floor module has a floor module that a person can walk.

Re claim 18, the connecting device can be part 6a shown in figure 3.

Re claim 21, the floor modules are constructed and fastened to the skin of the aircraft in such a way that after installation in the aircraft, the modules can be removed again in an arbitrary sequence. This is the case since the floor modules are installed within the bottom portion of the fuselage and thus the modules can be removed also.

Re claim 26, the prefrabricated lower cargo deck floor module of Airbus has the claimed parts (see above) and can rest within the fuselage without the module being connected to the fuselage.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 13, 14-15, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin 3612316 in view of Bergholz 4479621, Micale 5806797 and/or Powell 20040237439.

Re claims 1 and 2, Baldwin discloses a floor (at the bottom portion of the aircraft) for a cargo compartment of an aircraft having at least one floor elements 18, 14 and functional units 28, 40, 34, 108, which are connected to floor element to carry such units (see figure 2), and floor beam 12 supporting the floor element and adapted to the skin of the aircraft. The floor elements 18, 14 are connected to the floor beam. The floor beam is attached to skin at at least three different points of the floor beam. See the marked up drawing below. Baldwin is silent on the prefabricated floor modules. However, Micale discloses that to prefabricate an aircraft structure is well known. The prefabricated structures are then used to build the fuselage. See figure 16. In addition, Powell discloses that to prefabricate a structure is well known.

It would have been obvious to one skilled in the art at the time the invention was made to have made prefabricated floor modules in Baldwin's system as taught by Micale and/or Powell so that the floor system for an aircraft can be assembled and disassembled quickly.

In addition, Baldwin does clearly show that the floor element 12 is connected to the skin of the fuselage at the two horizontal sections (see figure 1). Baldwin also seems to show that floor element 12 being connected to the skin with the two vertical elements (not numbered but is clearly shown in figure 1). Although the examiner believes that Baldwin seems to show what has been claimed, the examiner will also make an alternative rejection to claim 1 by citing

Bergholz, which shows that connect three different points of the floor beam to the fuselage is well known. See the marked up copy below.

It would have been obvious to one skilled in the art at the time the invention was made to have attached the floor beam of Baldwin as modified by Micale and/or Powell and as taught by Bergholz so as to safely attach the prefabricated floor to the fuselage.

Re claim 3, Baldwin discloses at least one of an electrical control device and mechanical control device for controlling the functional unit is connected to the functional unit. See figure 6. See column 3, lines 21-41.

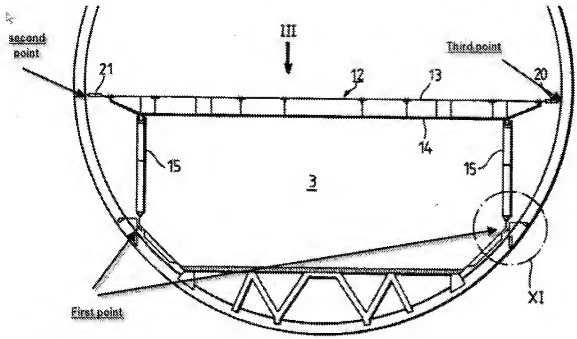
Re claim 13, people can walk on the floor panels shown in figure 1 of Baldwin.

Re claims 14 and 15, the insulation devices are not numbered but are clearly shown in figure 1 of Baldwin. These devices connect the fuselage to the floor modules. There are the two vertical insulation elements connected between the fuselage and the floor modules.

Re claim 20, the examiner takes official notice that lining element and a mounting device for the lining elements are well known and that one skilled in the art would have used such elements and devices so as to protect the interior of Baldwin.

Re claim 21, the floor modules can be fastened to the skin and removed again in an arbitrary sequence as taught by the prior arts above.

It is clear that the floor is attached to the fuselage. The fuselage has a skin that is at the outer part of the aircraft. Since the floor is attached to the fuselage, it also is configured and adapted for connection to the skin of the aircraft.



Claims 4-7, 12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Bergholz 4479621, Micale and/or Powell as applied to claim 1 above, and further in view of Owen 6061982.

Baldwin as modified by Bergholz, Micale and/or Powell discloses all claimed parts except for the floor modules having channels to hold electrical leads/wires or water conduits to link other similar conducting devices or water conduits in an adjacent floor module to form an overall conducting system when the floor modules are attached to each other. However, Owen teaches that floor modules having power cables or electrical leads/wires 20, 26 and water

conduits or drainage devices 14, 15 that run across multiple floor modules and forming an overall conducting system are well known. See figure 1.

It would have been obvious to one skilled in the art at the time the invention was made to have used floor modules and made the modules of Baldwin have the capability to carry electrical leads/wires or water conduits to link other similar conducting devices or water conduits in an adjacent floor module as taught by Owen to have a floor module system that run the whole fuselage so that the aircraft can carry more payloads and to quickly assemble and disassemble the floor modules from the fuselage.

Re claim 4, the examiner takes official notice that transmission sockets are well known in this day and age. It would have been obvious to one skilled in the art at the time the invention was made to have use power transmission sockets in Baldwin's system so that the transmission of power can run across the floor modules for easier assembly and disassembly. Applicant has not challenged this and is now admitted prior art.

Re claims 6 and 7, the branches are shown in figure 1 of Owen. See parts 20, 26. Re claim 7, see parts 70 and 72, which are the mechanical connections. See figure 6 of Owen. It would have been obvious to one skilled in the art at the time the invention was made to have used braches and mechanical connections in Baldwin's system as taught by Owen to allow floor modules to be connected mechanically and electrically.

Re claim 18, Owen discloses floor modules having a connecting device (which is the outer covering of the wires 20 shown in figure 1) for electronic components. The fixation device can be parts 18 or 42, 50.

Re claim 19, Baldwin is silent on the water tanks and the connecting devices. Please note that Owen teaches water tanks 86 and a connecting device 14, 15 are well known. It would have been obvious to one skilled in the art to have used water tanks and/or connecting devices 14 in Baldwin's system as taught by Owen to move liquid through the floor modules.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Bergholz 4479621, Micale and/or Powell as applied to claim 1 above, and further in view of Telair International DE19712278.

Baldwin as modified by Bergholz, Micale and/or Powell discloses all claimed parts except for the inspection openings with floor element section and the fast action closure device. However, Telair discloses that inspection openings with floor element sections 42 and fast action closure devices (not numbered but is next to number 59 in figure 1) are well known. The bilge space is disclosed by Baldwin.

It would have been obvious to one skilled in the art at the time the invention was made to have used inspection openings with fast action closure devices in Baldwin's system as taught by Telair to allow easy access through the floor modules for safety inspections.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Bergholz 4479621, Micale and/or Powell as applied to claim 1 above, and further in view of Tovani 5827022.

Baldwin as modified by Bergholz , Micale and/or Powell discloses all claimed parts except for the sealing device or leakproof connecting elements. However, Tovani discloses that sealing devices are well known. See figure 1 and where number 22 is pointed to.

It would have been obvious to one skilled in the art at the time the invention was made to have used sealing devices Baldwin's system as taught by Tovani to have a tighter seal over and below the floor elements and between floor elements.

Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baldwin as modified by Bergholz 4479621, Micale and/or Powell as applied to claim 1 above, and further in view of Nordstrom 7410128.

Baldwin as modified by Bergholz, Micale and/or Powell discloses all claimed parts except for the bulkheads and fixation devices. However, Nordstrom discloses that Bulkheads 48 with fixation devices are well known. See figure 2.

It would have been obvious to one skilled in the art at the time the invention was made to have used bulkheads and fixation devices in Baldwin's system as taught by Nordstrom as separation barriers for better organization. Please note that the bulkhead has ballistic resistant materials since it can resist ballistic parts.

Claims 26, 28, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergholz 4479621 in view of Huber 6517028

Bergholz discloses an aircraft having a cylindrical fuselage, prefabricated cargo floor module having at least one floor element 13, a functional unit 34, and floor beam supporting the floor element (see figure 4) that adapted for connection to a skin of said aircraft with parts shown in figure 4. The prefabricated cargo floor module can rest on the cylindrical fuselage without the floor module being connected to the fuselage. This occurs when the floor module can be angled with one end resting on the very bottom of the fuselage while the other end touches the side portion of the inner fuselage. Please note that the desired finished position is when the floor module is mounted and connected to the fuselage with parts 20, 21. However, when the floor module is inside the fuselage, it doesn't have to be connected to the fuselage with parts 20, 21. This meets what has been claimed. Plus, the last paragraph of claim 26 is alternatively interpreted. The floor module can rests within the fuselage without the floor module being connected to the fuselage with parts 20 since the parts 15 support the floor module prior to the parts 20 are used to connect the floor module to the side of the fuselage.

Although Bergholz is silent concerning the floor module being used to form a "lower" cargo deck floor, Huber clearly shows that floor modules used to form a lower cargo deck is notoriously well known. Huber also shows upper and lower compartment/decks are well known. See figures 2-5.

It would have been obvious to one skilled in the art at the time the invention was made to have made Bergholz's aircraft have upper and lower decks and floor module forming a lower cargo deck as taught by Baldwin so as to have a lower cargo deck to accommodate payloads at the lower portion of the fuselage.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bergholz 4479621 in view of Owen 6061982 and Huber 6517028.

Bergholz discloses all claimed parts (see the rejection) except for the floor module having a water tank and the lower cargo deck/compartment. Huber clearly shows that floor modules used to form a lower cargo deck is notoriously well known. Huber also shows an upper and lower deck/compartment. See figures 2-5.

It would have been obvious to one skilled in the art at the time the invention was made to have made Bergholz's aircraft have upper and lower decks/compartments and floor module forming a lower cargo deck as taught by Baldwin so as to have a lower cargo deck to accommodate payloads at the lower portion of the fuselage.

In addition, Owen teaches that floor modules water conduits or drainage devices 14, 15 (which are water tanks) that run across multiple floor modules and forming an overall conducting system are well known. See figure 1.

It would have been obvious to one skilled in the art at the time the invention was made to have used water tanks in Bergholz as taught by Owen to accommodate the passengers' need.

Response to Arguments

Concerning the argument about independent claim 1 on page 13 of applicant's arguments, the examiner respectfully disagrees with applicant's opinion that a person skilled in the art would have not combined Baldwin with Bergholz. Bergholz is used in the rejection of claim 1 to show that connecting floor beams at three different positions to the skin of the fuselage is well known. A person skilled in the art would have found it obvious to attach the

floor beam of Baldwin at three different positions to the fuselage for safer attachment and weight distribution. As for the argument about no connection with the bottom part of the aircraft is provided in the Baldwin reference, the examiner respectfully disagrees. Baldwin does seem to show connection of the floor beam to the bottom of the fuselage. Nevertheless, the Bergholz was used to teach that to have floor attachment to the bottom of the fuselage is well known. A person skilled in the art would recognize that by placing support at the middle of the floor beam and connecting that support to the bottom of the fuselage would allow better weight support and distribution in Baldwin's system.

Applicant has also argued on the last paragraph of page 14 that the floor element is not connected to the bottom part of said aircraft. Applicant brought forth the definition of "bottom" as "the lowest part or place". The examiner, however, must read the claims with the broadest and most reasonable interpretation. In this situation, bottom as defined by dictionary.com as "the under or lower side". Baldwin in one interpretation shows the floor beam being connected to the bottom or lower side of the fuselage. Alternatively, Beergholz in the marked up figure 2 attached above, also shows that to attach floor beams to the bottom or lower side of the fuselage is well known.

As for the argument concerning claims 26-29, the examiner respectfully disagrees with applicant's opinion that a person skilled in the art would not have looked to Huber to teach using upper and lower cargo deck floor module. A person skilled in the art would recognize that to have modified Bergholz's interior to have an upper and lower deck as taught by Huber would allow the aircraft to have different compartments for better interior organization. This would

certainly motivate one skilled in the art to have made the modification of Bergholz's interior to have both an upper and lower cargo deck floor modules.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 12-8.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Collins can be reached on 571-272-6886. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tien Dinh/
Primary Examiner, Art Unit 3644